

MTS-3181US

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10 the first ink pressure chamber, the first partition wall, said pressure
11 buffer chamber, the second partition wall and the second ink pressure chamber are
12 arranged in sequence along a thickness direction of said piezoelectric block,

13 said first fixed wall disposed adjacent to said first ink pressure
14 chamber and said second fixed wall disposed adjacent to said second ink pressure
15 chamber, and

16 the piezoelectric block is an integrally sintered one piece block
17 structure.

1 68. (Amended) The ink-jet recording head as set forth in claim 3,
2 wherein at least one electrode is further interposed between said two electrodes.

1 81. (Amended) An ink-jet recording head comprising at least one
2 piezoelectric block having (a) first and second ink pressure chambers, each pressure
3 chamber communicating with a nozzle for ejecting ink supplied from an ink supply,
4 (b) first and second partition walls, each partition wall serving as a driving portion for
5 one of the two ink pressure chambers, each partition wall including a piezoelectric
6 element and at least two electrodes for driving said piezoelectric element, (c) a
7 pressure buffer chamber, and (d) first and second fixed walls,

8 wherein at least one of said electrodes is embedded in said partition
9 wall,

10 the first ink pressure chamber, the first partition wall, said pressure
11 buffer chamber, the second partition wall and the second ink pressure chamber are
12 arranged in sequence along a thickness direction of said piezoelectric block,

13 said first fixed wall disposed adjacent to said first ink pressure
14 chamber and said second fixed wall disposed adjacent to said second ink pressure
15 chamber, and

16 surfaces of the two electrodes are oriented perpendicular to the
17 thickness direction, the driving portion is polarized in the thickness direction and
18 perpendicular to the surfaces of the electrodes.